



## AIRPORT SYSTEMS: Design, Planning & Management Course

### Overview of the program



The essential elements of current international airport planning and design trends, including airport master planning, layout plans, geometric design and layout of the airfield and terminal facilities, are covered in this course.

Delegates also will be schooled in obstruction analysis, signage and lighting, forecasting, airside and landside interface, and capacity and delay effects. Environmental planning, such as hazardous wildlife attractants, airport noise and compatible land use, is fully covered as well.

- Understand how fundamentals of design, planning and management are integrated into airport facilities. Included are a review of current airport facilities, and their industry ranking in terms of passenger and cargo movement
- Recognize the international differences in planning and design and understand the physical differences of airport design, including terminal facilities and aircraft parking
- Understand the concept of Multi-Airport Systems and how they impact airport planning and design.
- Identify factors of landside access and egress including intermodal transportation systems to achieve an orderly flow of traffic at the facility. Planning issues related to airport ground access improvements will be examined.
- Understand the concepts and process of baggage handling systems. Mechanical as well as computerized complex systems will be examined.

With continued growth in global air travel demand, airport owners and operators need cutting-edge technologies, flexibility and capacity to remain efficient and competitive. They also need reliable solutions to meet growing requirements and sustainability ambitions.

### Who should attend?

- Governments and regulatory agencies
- Airport Manager and Director
- Airport Operations Managers
- Airport Planning Consultants
- State Departments of transport
- Air Traffic Controllers
- Airline and civil aviation Managers
- Ground handling managers
- Duty Managers and supervisors
- Legal advisers
- Contractors and Architects
- Ministry of transport staffs



### training objectives

#### Course Content

1. The Future of the Airport and Airline Industry
  - Long-Term Growth
  - Organizational Change
  - Technological Change
2. The Evolving Airline Industry: Impacts on Airports
  - Trends in Airline Fleets
  - Airline Network Structures
  - Airline Scheduling and Fleet Assignment Optimization
  - Airline Operations at the Airport
3. Dynamic Strategic Planning of airports
  - Planning Concepts
  - Systems Perspective
  - The Forecast Is "Always Wrong"
  - Concept of Dynamic Strategic Planning
  - Dynamic Strategic Planning Process and Methods
4. Multi-airport Systems
  - Basic Concepts and Issues
  - Difficulties in Developing Multi-airport Systems
  - Market Dynamics
  - Planning and Developing Multi-airport Systems

5. Airfield Design

- Airport Classification Codes and Design Standards
- Wind Coverage, Airport Layouts
- Runway Length
- Runway Geometry
- Taxiways, Aprons
- Physical Obstacles

6. Airfield Capacity

- Measures of Runway Capacity
- Factors Affecting the Capacity of a Runway System
- Range of Airfield Capacities and Capacity Coverage
- A Model for Computing the Capacity of a Single Runway
- Generalizations and Extensions of the Capacity Model
- Capacity of Other Elements of the Airfield

7. Airfield Delay

- The Characteristics of Airside Delays
- Policy Implications and Practical Guidelines
- The Annual Capacity of a Runway System
- Estimating Delays with Models
- Measurement and Attribution of Delays

8. Demand Management

- Administrative Approaches to Demand Management of airports
- Economic Approaches to Demand Management of airports
- Hybrid Approaches to Demand Management of airports
- Policy Considerations

9. Passenger Buildings Configurations

- Systems Requirements for Airport Passenger Buildings
- Five Basic Configurations
- Evaluation of Configurations
- Assessment of Configurations
- Hybrid Configurations in Practice
- Overall Design of Passenger Buildings
- Detailed Design of Passenger Buildings

10. Ground Access and Distribution

- Regional Airport Access
- Cost-Effective Solutions Parking
- Automated People Movers, Landside & Airside APMs
- Airport APM Planning Issues
- Within-Airport Distribution of Checked Bags

Course fee:

USD \$ 3350 per trainee

Learning Method:


Online / Virtual /classroom

Language:

English

Duration: Online (15 days) Virtual / Class (5 days)



  
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*Airport Systems Course  
&  
Advanced Air Transport Management*

